Amendments to the Specification:

Please replace the paragraph beginning at page 6, line 1, with the following:

1,2-dioxetane enzyme substrates have been well established as highly efficient chemiluminescent reporter molecules for use in enzyme assays of a wide variety of types. These assays provide a preferred alternative to conventional assays that rely on radioisotopes, fluorophores, complicated color shifting, secondary reactions and the like. Dioxetanes developed for this purpose include those disclosed in U.S. Patent Nos. 4,978,614; 5,112,960; 5,538,847 and 5,582,980, as well as U.S. ~~Application Serial No. 09/362,047 (pending)~~ Patent No. 6,355,441. U.S. Patent No. 4,978,614 discloses, among others, 3-(2'-spiroadamantane)4-methoxy-4-(3"-phosphoryloxy)phenyl-1,2-dioxetane, which is commercially available from Applied Biosystems under the trade name AMPPD®, which is a registered trademark of PE Corporation (NY). U.S. Patent Nos. 5,112,960; 5,538,847 and 5,582,980 disclose similar compounds, wherein the adamantyl stabilizing ring is substituted, at either bridgehead position, with a variety of substituents, including hydroxy, halogen, and the like, which convert the otherwise static or passive adamantyl stabilizing group into an active group involved in the kinetics of decomposition of the dioxetane ring. Compounds of this type give a faster and stronger signal than AMPPD® in many applications. CSPD®, which is a registered trademark of PE Corporation (NY), is a second-generation dioxetane with a chlorine substituent on the adamantyl group. This material is also available from Applied Biosystems. CSPD® gives improved light intensity and detection sensitivity. U.S. ~~Application Serial No. 09/362,047 (pending)~~ Patent No. 6,355,441 discloses enzymatically cleavable chemiluminescent 1, 2-dioxetanes that emit in wavelengths close to the red or green end

of the visible spectrum. Each of the patents and applications cited in this paragraph are incorporated herein by reference in their entirety.

Please insert the following paragraph before the paragraph beginning at page 29, line 15.

The enhancer moiety can be formed by peralkylation of amino groups on the dendrimer or by peralkylcarbonylation of amino groups on the dendrimer by alkylation of amide groups on the dendrimer or by reaction of carboxylate groups on the dendrimer with an amino linked ammonium, phosphonium or sulfonium salt.

Please insert the following paragraph before the paragraph beginning at page 30, line 5.

The chemiluminescent substrate delivery system can further comprise a second dendrimer. The second dendrimer can comprise a chemiluminescence enhancer moiety. The second dendrimer can be covalently or ionically associated with the dendrimer which is conjugated to the enzymatically active chemiluminescent substrate moiety.